

# United States Patent and Trademark Office





UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/092,033 03/05/2002		3/05/2002	Stephen F. Fulghum	301489.1003-113	7761	
30407	7590	03/05/2003				
BOWDITC		•	EXAMINER			
161 WORCE P.O. BOX 93		AD		LEUBECKER, JOHN P		
FRAMINGHAM, MA 01701-9320				ART UNIT	PAPER NUMBER	
				3739		
				DATE MAILED: 03/05/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

		· · · · · · · · · · · · · · · · · · ·			MF_				
Office Action Summary		Application No		Applicant(s)	hit				
		10/092,033		FULGHUM, STEPHEN F.					
		Examiner		Art Unit					
		John P. Leubecl		3739					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status									
1)⊠	Responsive to communication(s) filed on 05 M	<u> March 2002</u> .							
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-f	înal.						
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
,—	Claim(s) <u>1-20</u> is/are pending in the application								
	4a) Of the above claim(s) is/are withdraw	wn from conside	ration.						
	Claim(s) is/are allowed.								
•	Claim(s) <u>1-20</u> is/are rejected.								
•	Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers									
	•	r							
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12) The oath or declaration is objected to by the Examiner.									
Priority under 35 U.S.C. §§ 119 and 120									
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a)	a) ☐ All b) ☐ Some * c) ☐ None of:								
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
* ^	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).								
	* See the attached detailed Office action for a list of the certified copies not received.								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).									
<ul> <li>a) ☐ The translation of the foreign language provisional application has been received.</li> <li>15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>									
Attachment(s)									
2) Notice	ee of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) _	4) _ 5) _ 4 6) _	Notice of Informal	/ (PTO-413) Paper No( Patent Application (PT0	•				

Art Unit: 3739

## Claim Rejections - 35 USC § 112

1. Claims 3 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 3 and 14, term "arc lamp current source" lacks antecedent basis.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 5-9, 11, 12, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Palcic et al. (U.S. Pat. 5,827,190).

Palcic et al. disclose a light source (8) (col.9, line 59 to col.10, line 2), an optical combiner (inherent in the provision of both the excitation light and reference light to common optical guide 10, col.8, lines 52-54), an image sensor (12), an a data processor (20). As to claim 5, the image sensor is at the distal end of an endoscope (2). As to claim 6, note col.9, line 62 to col.10, line 2. As to claim 7, note col.5, lines 11-13. As to claims 8 and 9, note col.5, lines 14-15 and lines 19-20. As to claim 11, since the excitation and reference lights share a common

Art Unit: 3739

optical path, they have the same angular orientation. The method steps of claims 12, 15 and 16 are met by inherent use of the device as described above.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2, 3, 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palcic et al.

As to claims 2, 3, 13 and 14, Palcic et al. fails to disclose any particular light source. It would be obvious to one of mere ordinary skill in the art, upon reduction to practice of the Palcic et al. device, to use any suitable light source among all that are known to be used in the art. The Examiner takes Office Notice that pulsed arc lamps (which inherently have current sources) are well known and used in the art.

As to claim 10, Palcic et al. also fails to disclose a lens mounted distally of the illumination fibers. However, the Examiner takes Official Notice that it is notoriously well known in the endoscope art to mount a lens distally of the illumination fibers to provide more directionally efficient lighting. It would therefore have been obvious the one of ordinary skill in the art to have provided distally mounted lenses on the end of the endoscope of Palcic et al.

Art Unit: 3739

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Palcic et al. in view of Alfano et al. (U.S. Pat. 5,847,394).

Palcic et al. show a schematic arrangement in Figure 2 including an endoscope probe (32) comprising optical fibers connected to a light source (30). Palcic et al. fails disclose whether or not the optical fibers are removable from a channel in the endoscope. Although it might be inherently obvious to make the illumination fibers of Palcic et al. removable (to use with other endoscopes, repair or replace damaged fibers, etc.) since it has been held in the courts that making an element "removable" does not usually involve inventive effort, Alfano et al. is cited to show that this feature is known and used by others (note Figure 9 and col.13, lines 58-60). It would have been obvious to the ordinarily skilled artisan to have made the illumination fibers removable for the reasons discussed above, and in view of the fact that others have done this.

### Double Patenting

7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

8. Claims 18-20 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 17-19 of prior U.S. Patent No. 6,364,829. This is a double patenting rejection.

Art Unit: 3739

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,364,829. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference between the application claims and the patented claims lies in the fact that the patented claims includes more limitations and is thus more specific. Thus, the invention of the application claims is in effect a "species" of the "generic" invention of the application claims. It has been held that the generic invention is "anticipated" by the "species". See *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since the application claims are anticipated by the patented claims, the application claims are not patentably distinct from them.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Since all of these references, including the ones used above have been cited by Applicant in the IDS filed September 9, 2002, no copies will be sent to Applicant.

Art Unit: 3739

Martens et al. (U.S. Pat. 5,363,854)—note teaching of providing excitation light and reference light, wherein the light sources have the same position and directional characteristic (col.2, lines 45-64).

Kaneko et al. (U.S. Pat. 5,749,830)—note teaching of providing excitation light and reference light. Also note Figures 51 and 52 which shows combining excitation light and reference light along a single optical path and Figure 53 which shows making the optical fibers removable.

Sano et al. (DE 195 35 114)—note common light path (8) for both excitation and illumination (Fig.2) and use of a removable fiber optic (60) with a lens (60a) (Fig.17).

Wang et al. ("Real-time in vivo endoscopic imaging of fluorescence from human colonic adenomas")—note section 2.1 regarding the lens epoxied on to the distal end of the fiber.

Freitag et al. (U.S. Pat. 6,061,591)--evidences that arc lamps are well known in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (703) 308-0951. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (703) 308-0994. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 305-3590 for After Final communications.

Art Unit: 3739

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0858.

John P. Leubecker Primary Examiner Art Unit 3739

jpl March 4, 2003